nancy appears to be followed by male genital tract abnormalities that are both structural (epididymal cysts, hypoplastic testes and cryptorchidism) and functional (abnormal semen). Due to prolonged latency in expression of DES effects, it will probably be another decade or more before the question of potential malignancy in men exposed to DES in utero is answered. Additional follow-up will also give insight into the probability of subnormal fertility in males exposed to DES in utero.

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**REFERENCES**

Driscoll SG, Taylor SH: Effects of prenatal maternal estrogen on the male urogenital system. Obstet Gynecol 1980 Nov; 56: 537-542

Gill WB, Schumacher GF, Bibbo M, et al: Association of diethylstilbestrol exposure in utero with cryptorchidism, testicular hypoplasia and semen abnormalities. J Urol 1979 Jul; 122:36-39

Whitehead ED, Leiter E: Genital abnormalities and abnormal semen analyses in male patients exposed to diethylstilbestrol in utero. J Urol 1981 Jan; 125:47-50


## Treatment of Disseminated Herpes Infections in Newborns and Infants

HERPES SIMPLEX VIRUS (HSV) infection of the newborn frequently results in fatal or otherwise devastating disease. The virus is usually transmitted during delivery from the maternal genital tract infected with herpes simplex virus, with HSV type 2 accounting for 85 percent of newborn HSV infections. Clinical signs appear most often between the first and second weeks of life, but may be present at birth or may not be found until the infant is a month of age. Untreated, 50 percent of all newborns with HSV infections will die and half of the survivors will be neurologically abnormal at 2 years of age. Infants with central nervous system (CNS) or disseminated disease have fatal infections in 75 percent of cases. Recently, vidarabine (adenine arabinoside) therapy administered intravenously has been shown to improve the outcome of newborns with HSV infections, mortality being significantly reduced in babies with CNS and disseminated disease from 74 percent to 38 percent. Disseminated HSV disease, however, shows less of a decrease, from 85 percent to 57 percent mortality. Most important with localized CNS disease, mortality was not only reduced from 50 percent to 10 percent, but 50 percent of infected babies were neurologically normal at 2 years with treatment.

These recent findings of the National Institute of Allergy and Infectious Disease (NIAID) Collaborative Antiviral Study Group indicate that vidarabine therapy significantly improves the outcome of newborns with HSV infections. Acyclovir (ACV, 9-(2-hydroxyethoxymethyl) guanine) is a new antiviral agent that has been shown to be effective against certain herpesvirus infections both in vitro and more recently in human studies. The substantially greater solubility of ACV, combined with its high therapeutic index and low toxicity, offers potentially important advantages over vidarabine. The NIAID is currently conducting a randomized study comparing the effect of vidarabine with ACV. The results of this study will not be known for at least two years.

Until the study is completed, a physician who suspects a case of neonatal herpes should admit the child to an intensive care hospital setting where facilities are available for caring for a critically ill infant. When possible the infant should be treated in a regional center involved in the NIAID study for management and random assignment to either ACV or vidarabine therapy. An infant in hospital in a nonstudy center intensive care unit should be treated with vidarabine. If skin vesicles are present or positive herpes cultures are available from any site in the infant, antiviral therapy should be initiated immediately, since 75 percent of infants who have cutaneous HSV will develop CNS disease. Almost 20 percent of newborns with proved HSV will not develop skin vesicles and 5 percent to 10 percent will require brain biopsy for virologic confirmation of HSV infection. Any baby excreting HSV within the first month of life should be considered in mortal danger and treated as outlined above. The prompt institution of therapy will favorably influence the outcome of an infant with proved herpetic infection.

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**REFERENCES**

Spector SA, Connor JD, Hintz M, et al: Single-dose pharmacokinetics of acyclovir. Antimicrob Agents Chemother 1981 Apr; 19:608-612

Whitley RJ, Nahmias AJ, Soong S-J, et al: Vidarabine therapy of neonatal herpes simplex virus infection. Pediatrics 1980 Oct; 66:495-501

Whitley RJ, Nahmias AJ, Visintine AM, et al: The natural history of herpes simplex virus infection of mother and newborn. Pediatrics 1980 Oct; 66:489-494


## *Campylobacter* Enteritis

*Campylobacter jejuni* is a recent addition to the differential diagnosis of inflammatory enteritis and is already recognized as a major cause of enteritis in humans. Several recent studies indicate that *Campylobacter* can be cultured from the stools of 4 percent to 14 percent of patients with diarrhea, a larger percentage than that for either *Salmonella* or *Shigella*.